



Well Name: CPC Mark 35-01

API: 05-123-12886

Q/Q:NWNE Sec. 35 T/R 4N65W

P&A Procedure

Engineer: Narayan (Sonu) Choudhary (720-939-2574)

Date 2/15/2017

Procedure:

- 1) Ensure Form 17 has been completed and reviewed.
- 2) MIRU workover rig, pump, and tank.
- 3) Blow down well and roll hole with fresh water, if possible.
- 4) ND WH, NU BOP.
- 5) POOH and LD 2 3/8" 4.7# J-55 tbgs @ 7068'.
- 6) RIH w/ wireline & CIBP. Set CIBP @ 6744' (50' above Nio top perf @ 6794'). Dump bail 2 sks of cement on top of CIBP.
- 7) Load hole with fluid and pressure test CIBP to 1000 psi with rig pumps. Hold for 15 minutes. Test will be considered successful if lose less than 100 psi. If test is unsuccessful, contact engineer.
- 8) RIH w/ 1' perforating gun and shoot 4-6 spf @ 4550'.
- 9) RIH w/ CICR and set @ 4450' (100' above perforations).
 - RIH with CICR on workstring.
- 10) Load annulus between production casing and workstring. Test to 750 psi for 15 minutes. Test is considered successful if lose less than 50 psi. If pressure test fails, contact engineer.
- 11) Establish injection rate. Pump 10 bbls Mud Flush (or similar spacer) followed by 242 sks of cmt. 15.8 ppg PlugCem through and 40 sks on top of the plug. (Assumption 4 1/2" 1 and 10" Hole)
- 12) RIH w/ 1' perforating gun and shoot 4-6 spf @ 2500'.
- 13) RIH w/ CICR and set @ 2400' (100' above perforations).
 - RIH with CICR on workstring.
- 14) Load annulus between production casing and workstring. Test to 500 psi for 15 minutes. Test is considered successful if lose less than 50 psi. If pressure test fails, contact engineer.
- 15) Establish injection rate.

- 16) Pump 10 bbls Mud Flush (or similar spacer) followed by 190 sxs of cmt. 15.8ppg PlugCem (assuming open hole 10'' and 4 ½'' production csg. And cement yield of 1.2)
- TOC should be ~500' in annulus above perforations. Ensure that cement does not come up past where the shoe plug is planned.
 - BH issues, pump 15.8 ppg PlugCem from HES.
- 17) Displace cement with 7.5 bbls fresh water (2 3/8 4.7# J-55 0.0039 bbls/ft tbh capacity).
- Number should be 2 bbls short of volume of workstring down to CICR.
- 18) Un-sting from CICR.
- 19) Place remaining 2 bbls of cement on top of CICR. Allow to fall on CICR as pulling out.
- 20) POOH w/ workstring.
- 21) Shut down for 4 hours (minimum). Confirm no pressure on the bradenhead or to surface. If pressure/gas migration remains, call engineer.
- 22) RIH w/ WL and cut production casing at 650'.
- 23) Circulate a MINIMUM of 2 bottoms up volumes (~110 bbls total) or until well is free of oil, gas, or any large cuttings.
- 24) Perform flow check for 5 minutes to ensure well is static and record current fluid weight in WellView.
- 25) Unland production casing.
- 26) POOH and LD production casing filling pipe every 6 joints.
- 27) RIH w/ workstring to 650' (top of casing).
- 28) Establish circulation.
- 29) Pump 10 bbls Mud Flush (or similar spacer) followed by 248 sx of cement as a balanced plug. TOC should be at surface.
- Known BH issues, pump 15.8 ppg PlugCem from HES and a minimum of a 300' plug placing cement at least 50' into surface casing. SDFN and ensure that well has no pressure prior to pumping second plug to surface. If pressure is present, contact engineer. Second plug can be Class G Neat cement.
 - Fox Hill Not Covered
- 30) POOH w/ workstring. Top off cement if needed. Cement needs to be ~10' from surface.
- 31) ND BOP. Top off cement as needed.
- 32) RDMO.

NOBLE ENERGY INC.

CPC Mark 35-01

NW NE	35-4N-65W
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660' FNL & 1981' FEL

WELD COUNTY, CO

Wattenberg

CURRENT WELLBORE SCHEMATIC

with PROPOSED P&A

2/15/2017

API:	05-123-12886
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COGCC #

GL Elev:	4750'
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KB Elev:	4761'
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Spud Date:	12/14/1985
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Surface Casing :

8 5/8" 24# @ 305'

Cement:	188 sks calculated
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TOC:	Surface
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TOC @ 6417'

Production Casing :

4 1/2" 15.10# E @ 7172'

Cement:	150 sks
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TD:	12/25/1985
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Cut surface casing off 6'-8' below surface.

Pump approx 248 sx shoe plug @ 650'

Will bring cement to surface.

Pump 10 sx on top of CICR

Pump 190 sxs of PlugCem cmt. (w/ GasChek)

Set CICR @ 2400'

Perforate casing @ 2500'	
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Pump 40 sx on top of CICR

Pump 242 sxs of PlugCem cmt. through (w/ GasChek)

Set CICR @ 4450'

Perforate casing @ 4550'

CIBP @ 6744' w/ 2 sx cement on top

Niobrara Perforations 6794' - 6960'**Codell Perforations 7061' - 7087'**

TD:	7181'
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